

Appendix F

RECOMMENDED IMPROVEMENTS

Table F-1
US Highway 89 Corridor Plan
Recommended Improvements by Segment/Time Frame

Imp. No.	Location	Milepost(s)	Deficiency		Improvement	Comments
			Description	Type		
SEGMENT 1 Utah State Line to Minnetonka Cave Rd. Mileposts 0.00 – 8.93						
Short-Range Improvements						
1	Utah state line –S. of St. Charles	0.00 – 6.83	1. Shoulder widths do not meet ITD standards. 2. Vehicles parked on roadway/lack of lake access parking between M.P. 0.0 – M.P. 3.09.	G	Widen shoulders to 6’.	Shoulder widening to be done over time in conjunction with other improvements.
2	Utah state line - N. Fish Haven	0.00 – 3.09	Driveway traffic conflicts.	O	Construct continuous two-way center turn lane between Fish Haven Creek and N. Fish Haven.	1. Two-way center turn lane would also address long-range level of service deficiency in southbound direction. 2. Potential encroachment impact to Scofield House (historic resource) in Fish Haven. 3. Crossing over Fish Haven Creek would have to be replaced to allow for fish passage. Impacts would be positive due to current degraded stream conditions.
3	Utah state line - N. Fish Haven	0.00 – 3.09	Need for scenic pull-outs.	O	Provide pull-outs.	Further study required to determine sites for pull-outs.
4	Utah state line	0.00	Turnaround needed for school buses, snow plows.	O	Construct turnaround.	Turnaround would be feasible at this location with minor property-taking (approx. 7,000 s.f.).
5	Lake West Blvd.	0.14	Northbound left-turn lane needed (ITD turn lane warrants met).	O	Construct left-turn lane.	Widening on west side of US 89 would be less costly.
6	Lake West Blvd.	0.14	Southbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane .	
7	Lake West Blvd.	0.14	Minor road approach grade too steep.	G	Raise minor road approach grade.	
8	Lakeside Dr.	1.17	Minor road approach lane too narrow.	G	Widen minor road approach.	
9	Loveland Ln.	2.02	Southbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	
10	Loveland Ln.	2.02	Minor road approach lane too narrow.	G	Widen minor road approach.	
11	Fish Haven Canyon Rd.	2.72	Northbound left-turn lane needed (ITD turn lane warrants met).	O	Construct left-turn lane.	Widening could be done on both sides.
12	Fish Haven commercial area	2.72	Lack of pedestrian facilities.	P	1. Construct off-street multi-use paths. 2. Construct pedestrian crossing improvements.	1. Within quarter-mile radius of US 89/Fish Haven Canyon Rd. intersection, construct two-way multi-use paths on both sides of US 89 no closer than 60’ of highway and on south side of Fish Haven Canyon Rd. 3. Construct pedestrian refuge island on n. side of US 89/Fish Haven Canyon Rd. intersection with striped crosswalk and advance pedestrian signing.
13	Fish Haven Canyon Rd.	2.72	Inadequate intersection sight distance when vehicles parked on north and south sides of intersection.	O	Remove parking on north and south sides of intersection.	Impacts to commercial establishment (Gladys’) on SW corner of intersection.
14	Fish Haven Cemetery Ln.	3.40	Minor road approach lane too narrow.	G	Widen minor road approach.	
15	North Beach Rd.	8.74	Southbound left-turn lane needed (ITD turn lane warrants met).	O	Construct left-turn lane with continuous two-way center turn lane between North Beach Rd. and Minnetonka Cave Rd.	1. To be constructed together with northbound left-turn lane at Minnetonka Cave Rd. (see Imp. No. 17 below). 2. Bridge widening at N. St. Charles Creek would be required, resulting in environmental impacts to creek.

Table F-1
US Highway 89 Corridor Plan
Recommended Improvements by Segment/Time Frame

Imp. No.	Location	Milepost(s)	Deficiency		Improvement	Comments
			Description	Type		
16	North Beach Rd.	8.74	Northbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	
17	Minnetonka Cave Rd.	8.93	Northbound left-turn lane needed (ITD turn lane warrants met).	O	Construct left-turn lane.	To be constructed together with continuous two-way center turn lane between North Beach Rd. and Minnetonka Cave Rd. (see Imp. No. 15 above).
18	Minnetonka Cave Rd.	8.93	Southbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	
Long-Range Improvements						
19	Lake West Blvd.	0.14	Minor road approach lane too narrow.	G	Widen minor road approach.	
20	Loveland Ln.	2.02	Northbound left-turn lane needed (ITD turn lane warrants would be met).	O	Construct left-turn lane.	Widening should be done on west side of US 89 due to proximity of lake and private property on east side.
21	Fish Haven Canyon Rd.	2.72	Southbound right-turn lane needed (ITD turn lane warrants would be met).	O	Construct right-turn lane.	
22	Fish Haven Cemetery Ln.	3.40	Southbound right-turn lane needed (ITD turn lane warrants would be met).	G	Construct right-turn lane.	
SEGMENT 2 Minnetonka Cave Rd. to Paris S. City Limits Mileposts 8.93 – 14.95						
Short-Range Improvements						
23	Bloomington Canyon Rd.	13.23	Minor road approach lane too narrow.	G	Widen minor road approach.	
24	Bloomington Canyon Rd.	13.23	Southbound right-turn lane needed (ITD turn lane warrants would be met).	O	Construct right-turn lane.	
SEGMENT 3 Paris S. City Limits to Ovid Corner (SH 36) Mileposts 14.95 – 20.23						
Short-Range Improvements						
25	E. 2nd North St. - Ovid Corner	16.23 - 20.15	Conflicts between general traffic and farm vehicles and livestock.	O	Widen shoulders to 10’.	
26	Church Farm Rd., Wallentine Rd.	17.61, 17.72	Stopping sight distances and intersection sight distances do not meet ITD standard due to vertical curve between Church Farm Rd. and Wallentine Rd.	G	Remove or decrease vertical curve.	Decrease needed in vertical curve would likely be minor.
27	Lanark Rd.	18.31	Northbound left-turn lane needed (ITD turn lane warrants met).	O	Construct left-turn lane.	Widening feasible on both sides of US 89.

Table F-1
US Highway 89 Corridor Plan
Recommended Improvements by Segment/Time Frame

Imp. No.	Location	Milepost(s)	Deficiency		Improvement	Comments
			Description	Type		
28	Lanark Rd.	18.31	Sight distance for northbound left-turns does not meet ITD standard due to vertical curve at Lanark Rd.	G	Remove or decrease vertical curve.	1. Decrease needed in vertical curve would likely be minor. 2. Vertical curve could be decreased by either lowering crest or filling bottom of curve.
29	Lanark Rd. - Ovid Corner	18.31 - 20.15	LOS does not meet ITD standard; inadequate passing opportunities.	C, O	Construct passing lanes.	1. Passing lanes would alternate by direction. 2. Length of passing lanes in each direction would be roughly 0.75 mi., including tapers. 3. Locating passing lanes between south of Ovid Creek Bridge (M.P. 19.82) and Lanark Rd. would avoid bridge widening.
30	Lanark Rd. - Ovid Corner	18.31 - 20.15	Difficult winter driving conditions.	O	1. Install roadside snow fence/barriers. 2. Implement Road Weather Information System (RWIS).	RWIS would include roadside sensor station integrated with dynamic message signs and other advance traveler information tools.
31	Ovid Creek Bridge (south)	19.84	Bridge width does not meet ITD standard.	G	Widen bridge.	
32	Ovid Corner	20.15	1. Intersection sight distance for southbound right-turns at US 89 connector does not meet ITD standard due to horizontal curve. 2. Northbound left-turn lane needed at US 89 connector (ITD turn lane warrants met). 3. Intersection sight distance for eastbound left-turns at SH-36 does not meet ITD standard due to horizontal curve. 4. Westbound/southbound right-turn laned needed at SH-36 (ITD turn lane warrants met). 5. Drivers unaware of stop sign on eastbound approach of SH-36. 6. Drivers on eastbound approach of SH-36 have difficulty determining whether westbound/southbound vehicles are turning right or continuing along US 89.	G	Realign SH 36 to "T" into US 89 at mid-point of Ovid curve. This would include: <ul style="list-style-type: none">Closure of US 89 connector and existing section of SH 36 between US 89 connector and US 89 to through traffic (local access only).Construction of several small local access roads.Construction of northbound left-turn lane.Construction of westbound/southbound right-turn lane.	This improvement recommended based on relatively low estimated cost and low impacts compared to other options.
Long-Range Improvements						
33	E. 2nd North St.	16.23	Northbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	1. Striping only would be required (no widening). 2. Removal of parking may be required.
34	E. 2nd North St.	16.23	Southbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	
SEGMENT 4 Ovid Corner (SH 36) to Montpelier E. City Limit Mileposts 20.23 – 27.17						
Short-Range Improvements						
35	Ovid Corner - Cutler Ln.	20.23 - 22.45	Shoulder widths do not meet ITD standard.	G	Widen shoulders to 6'.	
36	Ovid Creek Bridge (e.)	20.40	Bridge width does not meet ITD standard.	G	Widen bridge.	
37	West of Bern Rd. - West of 12th St. Overpass	24.00 - 24.80	Shoulder widths do not meet ITD standard.	G	Widen shoulders.	Wetland areas along both sides of US 89 would be moderately to significantly impacted, requiring mitigation. (Wetlands are nearly continuous along both sides of highway).
38	12 th St. Overpass	25.14 – 25.29	Drivers not aware of bicyclists on overpass.	B	Install push-button activated advance warning signs on each end of overpass.	

Table F-1
US Highway 89 Corridor Plan
Recommended Improvements by Segment/Time Frame

Imp. No.	Location	Milepost(s)	Deficiency		Improvement	Comments
			Description	Type		
39	4th St./Clay St.	26.28	Southbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	1. Striping only would be required (no widening). 2. Removal of parking may be required.
40	4th St./Clay St.	26.28	Northbound right-turn lane needed (ITD turn lane warrants met).	O	Construct right-turn lane.	Striping only would be required (no widening).
41	4th St./Clay St.	26.28	Drivers unaware of stop sign on westbound approach.	S	Install red flashing beacon on stop sign.	
42	Washington St./4th St. - 4th St./Clay St.	25.98 - 26.28	Lack of sidewalks.	P	Construct sidewalks.	
Long-Range Improvements						
43	4th St./Clay St.	26.28	LOS does not meet ITD standard.	C	Install traffic signal.	Additional study of this intersection is needed.